

REMARKS/ARGUMENTS

1.) Claim Amendments

The Applicants have amended claims 1, 7, 13, 19, and 25. Claims 2, 8, 20, and 26 have been canceled. Accordingly, claims 1, 3-7, 9-19, 21-25, and 27-30 are pending in the application. Favorable reconsideration of the application is respectfully requested in view of the foregoing amendments and the following remarks.

2.) Numerous Unresolved Technical Errors in Office Action

The Examiner has made numerous technical errors in his analysis of his primary reference, Graves, et al. (US 2002/0191250). The Applicants pointed out a number of these errors in the Response to Final Office Action filed 10/07/2005, but the Examiner *did not respond to those arguments*. Instead, the Examiner stated that the arguments "are moot in view of the new ground(s) of rejection." However, the grounds for rejection in the current Office Action are *exactly the same* as those recited in the Final Office Action dated 06/15/2005. In fact, with a few minor exceptions, the Examiner merely copied the entire Final Office Action dated 06/15/2005 and put a new date on it. Therefore the grounds for rejection are not new, and the Applicants' arguments are not moot.

The Applicants have the right to have their arguments fully considered and either rebutted or accepted. Since the Examiner did not do that, the Applicants request that the Examiner fully address the technical errors pointed out by the Applicants and provide proper reasoning for why the current rejections should stand. The Applicants further request that if an additional Office Action is issued, such Office Action should be a non-final Office Action due to the deficiencies in the current Office Action.

3.) Claim Rejections – 35 U.S.C. § 103(a)

In paragraphs 1-2 of the Office Action, the Examiner rejected claims 1, 2, 4-8, 10-20 and 22-30 under 35 U.S.C. § 103(a) as being unpatentable over Graves, et al. (US 2002/0191250) in view of Deng, et al. (US 2002/0196491). The Applicants respectfully disagree.

Regarding claim 13, the Examiner contends that Graves discloses the claimed limitations except that Grave's edge photonic switches 14a, 14b are not passive wavelength multiplexers. The Examiner further contends that Deng discloses the use of passive wavelength multiplexers for this function. The Applicants respectfully disagree.

Regarding the Examiner's interpretation of Graves, he interprets block 12c of FIG. 3 to be a radio access unit. However, this is not correct. Graves' block 12c is an access multiplexer, which is part of the transport network, not the RBS. In the same manner, the Examiner states that block 12d is a fixed access unit. However, this is also incorrect. Block 12d is also an access multiplexer, which is part of the transport network. Therefore, the radio access unit and the fixed access unit, as recited in claim 13, are not disclosed or suggested by Graves or Deng.

The Examiner's analysis includes several other mistakes/misconceptions regarding Graves. Specifically, the Examiner describes Graves' second edge photonic switch 14b as comprising several other nodes. This is incorrect. Graves' second edge photonic switch 14b is actually a stand-alone node according to Graves. The Examiner further describes Graves' first edge photonic switch 14a to be the same as the Applicants' second wavelength multiplexer. This is also incorrect. The first edge photonic switch 14a in Graves connects to other access networks. The Applicants' second wavelength multiplexer, on the other hand, is a node placed in the central office, connecting to main nodes in the transport network.

The Examiner identifies Graves' block 10 as a radio access unit. However, block 10 is actually a "cellular base station" according to Graves. The Applicants have amended claim 13 to clarify that the radio base station is divided into a main unit and a radio access unit, with the main unit comprising a digital baseband component and a digital intermediate frequency processing unit, and the radio access unit comprising only radio-related functions of the base station. Thus, Graves' cellular base station 10 is not the equivalent of the Applicants' radio access unit. Basis for the amendments to claim 13 is found in the originally filed specification on page 2, paragraph [0004].

Thus, several limitations in claim 13 are not taught or suggested by Graves or Deng. The use of a radio access unit and a fixed access unit is not an obvious modification of Graves and Deng. The Applicants note that on page 6 of the Office

Action, the Examiner states, "However, Graves discloses DWDM carrier wavelengths are pre-assigned to each access multiplexer (12a, 12b, 12c, 12d) (page 8, paragraph 0099, lines 4-5) (e.g. per each of radio unit and fixed access subscriber), therefore, it would have been obvious that each of radio unit and fixed access subscriber can be assigned different wavelength." However, this is another misunderstanding of Graves. Instead, Graves discloses a DWDM wavelength *per access multiplexer*, but that is NOT the same thing as a wavelength per radio remote unit (RRU) or per fixed access subscriber, as the Examiner contends. The access multiplexer in Graves is an electrical switch that has a DWDM specific wavelength on the uplink. An RRU can never use such a link. The RRU needs a separate dedicated optical path through the network end-to-end. This is a key difference between the claimed invention and Graves, and one that the Examiner has refused to address.

In addition to claim 13, independent claims 1, 7, 19, and 25 have also been amended to recite that the radio base station is divided into a main unit and a radio unit, with the main unit comprising a digital baseband component and a digital intermediate frequency processing unit, and the radio unit comprising only radio-related functions of the base station. These claims have also been amended to incorporate the limitation of transmitting and receiving the radio unit communications between the second passive wavelength multiplexer and at least one main unit connected to the second passive wavelength multiplexer and to a radio network. Consequently, dependent claims 2, 8, 20, and 26 have been canceled. The amendments to independent claims 1, 7, 13, and 19 have clarified the meaning of "radio unit" and "main unit" in the claims, and such components are not taught or suggested by the combination of Graves and Deng.

It is also noted that independent claims 1, 7, 13, 19, and 25 all recite transmitting and receiving radio unit communications between at least one radio unit and a first passive wavelength multiplexer via fiber optic connections. Since the disclosed system in Graves is incompatible with radio access units, as discussed above, the combination of Graves and Deng cannot render the claimed invention obvious. Therefore, the withdrawal of the rejection and the allowance of claims 1, 7, 13, 19, and 25 are respectfully requested.

Claims 3-6, 8-12, 14-18, 21-24, and 27-30 are dependent claims reciting further limitations in combination with the novel elements of their amended base claims. Therefore, the allowance of claims 3-6, 8-12, 14-18, 21-24, and 27-30 is respectfully requested.

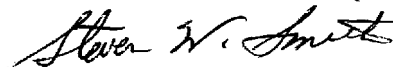
In paragraph 3 of the Office Action, the Examiner rejected claims 3, 9 and 21 under 35 U.S.C. § 103(a) as being unpatentable over Graves in view of Deng, and further in view of Nishihara (US 6,512,616). As noted above, however, Graves does not in fact disclose several of the limitations asserted by the Examiner. Deng and Nishihara do not overcome these shortcomings of Graves. In addition, the amendments to base claims 1, 7, and 19 have clarified the meaning of "radio unit" and "main unit" in the claims, and such components are not taught or suggested by the combination of Graves, Deng, and Nishihara. Therefore, the allowance of dependent claims 3, 9, and 21 is respectfully requested.

CONCLUSION

In view of the foregoing remarks, the Applicants believe all of the claims currently pending in the Application to be in a condition for allowance. The Applicants, therefore, respectfully request that the Examiner withdraw all rejections and issue a Notice of Allowance for claims 1, 3-7, 9-19, 21-25, and 27-30.

The Applicants request a telephonic interview if the Examiner has any questions or requires any additional information that would further or expedite the prosecution of the Application.

Respectfully submitted,



Steven W. Smith
Registration No. 36,684

Date: March 23, 2006

Ericsson Inc.
6300 Legacy Drive, M/S EVR 1-C-11
Plano, Texas 75024

(972) 583-1572
steve.xl.smith@ericsson.com